L Number	Hits	Search Text	DB	Time stamp
1	38	(aav with vector) same ((promoter or promoters) with (small or size or minimal or minimize or limit$3))	USPAT	2003/07/14 08:13
2	30	(((promoter or promoters) with (small or size or minimal or minimize or limit$3)) same aav) not ((aav with vector) same ((promoter or promoters) with (small or size or minimal or minimize or limit$3)))	USPAT	2003/07/14 08:14
3	20	((element or elements) same (aav with vector) same (small or size or minimal or minimize or limit$3)) not (((aav with vector) same ((promoter or promoters) with (small or size or minimal or minimize or limit$3))) or ((((promoter or promoters) with (small or size or minimal or minimize or limit$3)) same aav) not ((aav with vector) same ((promoter or promoters) with (small or size or minimal or minimize or limit$3)))))	USPAT	2003/07/14 08:15
4	25	(aav with vector) same ((promoter or promoters) with (small or size or minimal or minimize or limit$3))	US-PGPUB; EPO; JPO; DERWENT	2003/07/14 08:15
5	14	((element or elements) same (aav with vector) same (small or size or minimal or minimize or limit$3)) not (((aav with vector) same ((promoter or promoters) with (small or size or minimal or minimize or limit$3))) or ((((promoter or promoters) with (small or size or minimal or minimize or limit$3)) same aav) not ((aav with vector) same ((promoter or promoters) with (small or size or minimal or minimize or limit$3)))))	US-PGPUB; EPO; JPO; DERWENT	2003/07/14 08:17
6	30	(((promoter or promoters) with (small or size or minimal or minimize or limit$3)) same aav) not ((aav with vector) same ((promoter or promoters) with (small or size or minimal or minimize or limit$3)))	US-PGPUB; EPO; JPO; DERWENT	2003/07/14 08:20
-	31	FORMAT ADJ SAVE	USPAT	2000/07/27 13:15
-	1159	aav or adenoassociat$ or adeno adj associat$	USPAT	2001/06/06 14:25
-	1188	aav? or (aav or adenoassociat$ or adeno adj associat$)	USPAT	2001/06/06 14:25
-	726	itr or itrs or inverted adj terminal	USPAT	2000/09/23 19:01
-	346853	express$	USPAT	2000/09/23 18:21
-	74	(itr or itrs or inverted adj terminal) with express$	USPAT	2000/09/23 18:21
-	56	((itr or itrs or inverted adj terminal) with express$) and (aav? or (aav or adenoassociat$ or adeno adj associat$))	USPAT	2002/08/30 13:30
-	303	itr or itrs or inverted adj terminal	EPO; JPO; DERWENT	2000/09/23 19:02
-	341	aav or adenoassociat$ or adeno adj associat$ or aav?	EPO; JPO; DERWENT	2000/09/23 19:02
-	58	(itr or itrs or inverted adj terminal) same (aav or adenoassociat$ or adeno adj associat$ or aav?)	EPO; JPO; DERWENT	2001/06/05 14:37
-	36	express$ with (itr or itrs or inverted adj terminal)	EPO; JPO; DERWENT	2001/06/05 14:37
-	18	(express$ with (itr or itrs or inverted adj terminal)) and ((itr or itrs or inverted adj terminal) same (aav or adenoassociat$ or adeno adj associat$ or aav?))	EPO; JPO; DERWENT	2001/06/05 14:37
-	83	((itr or itrs or inverted adj terminal) with express$) and (aav? or (aav or adenoassociat$ or adeno adj associat$))	USPAT	2001/06/05 14:38
-	73	(itr or itrs or inverted adj terminal) same (aav or adenoassociat$ or adeno adj associat$ or aav?)	EPO; JPO; DERWENT	2001/06/06 14:00
-	45	express$ with (itr or itrs or inverted adj terminal)	EPO; JPO; DERWENT	2001/06/06 14:05
-	21	(express$ with (itr or itrs or inverted adj terminal)) and ((itr or itrs or inverted adj terminal) same (aav or adenoassociat$ or adeno adj associat$ or aav?))	EPO; JPO; DERWENT	2001/06/06 14:07
-	1561	aav? or (aav or adenoassociat$ or adeno adj associat$)	USPAT	2001/06/06 14:25
-	1366	amyloid	USPAT	2001/06/06 14:26
-	111	(aav? or (aav or adenoassociat$ or adeno adj associat$)) and amyloid	USPAT	2001/06/06 14:26
-	1	(aav? or (aav or adenoassociat$ or adeno adj associat$)) same amyloid	USPAT	2001/06/06 14:26

-	12	amyloid with promoter$1 and (aav? or (aav or adenoassociat$ or adeno adj associat$))	USPAT	2001/06/06 14:27
-	130	((itr or itrs or inverted adj terminal) with express$) and (aav? or (aav or adenoassociat$ or adeno adj associat$))	USPAT	2002/08/30 14:29
-	59	((itr or itrs or inverted adj terminal) with express$) and (aav? or (aav or adenoassociat$ or adeno adj associat$))	US-PGPUB	2002/08/30 14:29
-	1	6346415.pn.	USPAT	2003/05/16 09:07
-	461	aav with vector	USPAT	2003/05/16 10:05
-	58350	promoter or promoters	USPAT	2003/05/16 10:05
-	2600763	small or size or minimal or minimize or limit$3	USPAT	2003/05/16 10:07
-	10327	(promoter or promoters) with (small or size or minimal or minimize or limit$3)	USPAT	2003/05/16 10:07
-	217	(aav with vector) and ((promoter or promoters) with (small or size or minimal or minimize or limit$3))	USPAT	2003/05/16 10:08
-	37	(aav with vector) same ((promoter or promoters) with (small or size or minimal or minimize or limit$3))	USPAT	2003/07/14 08:11
-	1355158	element or elements	USPAT	2003/05/16 10:32
-	66	((promoter or promoters) with (small or size or minimal or minimize or limit$3)) same aav	USPAT	2003/05/16 10:26
-	29	(((promoter or promoters) with (small or size or minimal or minimize or limit$3)) same aav) not ((aav with vector) same ((promoter or promoters) with (small or size or minimal or minimize or limit$3)))	USPAT	2003/07/14 08:12
-	41	(element or elements) same (aav with vector) same (small or size or minimal or minimize or limit$3)	USPAT	2003/05/16 10:33
-	17	((element or elements) same (aav with vector) same (small or size or minimal or minimize or limit$3)) not (((aav with vector) same ((promoter or promoters) with (small or size or minimal or minimize or limit$3))) or ((((promoter or promoters) with (small or size or minimal or minimize or limit$3)) same aav) not ((aav with vector) same ((promoter or promoters) with (small or size or minimal or minimize or limit$3)))))	USPAT	2003/07/14 08:13
-	19	(aav with vector) same ((promoter or promoters) with (small or size or minimal or minimize or limit$3))	US-PGPUB; EPO; JPO; DERWENT	2003/07/14 08:13
-	10	((element or elements) same (aav with vector) same (small or size or minimal or minimize or limit$3)) not (((aav with vector) same ((promoter or promoters) with (small or size or minimal or minimize or limit$3))) or ((((promoter or promoters) with (small or size or minimal or minimize or limit$3)) same aav) not ((aav with vector) same ((promoter or promoters) with (small or size or minimal or minimize or limit$3)))))	US-PGPUB; EPO; JPO; DERWENT	2003/07/14 08:13
-	28	(((promoter or promoters) with (small or size or minimal or minimize or limit$3)) same aav) not ((aav with vector) same ((promoter or promoters) with (small or size or minimal or minimize or limit$3)))	US-PGPUB; EPO; JPO; DERWENT	2003/07/14 08:13

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$0.30 Estimated cost File1
$0.01 TELNET
$0.31 Estimated cost this search
$0.31 Estimated total session cost 0.087 DialUnits

File 155:MEDLINE(R) 1966-2003/Jul W2
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*File 155: Medline has been reloaded and accession numbers have changed. Please see HELP NEWS 155.

Set Items Description
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? ds
Set Items Description
S1 312 COLLAGEN(4W)PROMOTER
S2 813062 SPECIFIC
S3 4 S1 (5N)S2
S4 828616 TISSUE OR TISSUES
S5 3 S1 (5N)S4
S6 130 S1 AND S2 NOT S3
S7 0 COLLAGEN(W)ALPHA (W)1(W)PROMOTER
S8 12 COLLAGEN(W)ALPHA (3N)PROMOTER
S9 678 AU=BRENNER D? OR AU=VELOX L?
? t s5/7/1-3
5/7/1
DIALOG(R)File 155:MEDLINE(R)
(c) format only 2003 The Dialog Corp. All rts. reserv.
10791638 97081112 PMID: 8922394
Distinct regions control transcriptional activation of the alpha1(VI) collagen promoter in different tissues of transgenic mice.
Braghetta P; Fabbro C; Piccolo S; Marvulli D; Bonaldo P; Volpin D; Bressan G M
Institute of Histology and Embryology, University of Padova, Italy.
Journal of cell biology (UNITED STATES) Nov 1996, 135 (4) p1163-77, ISSN 0021-9525 Journal Code: 0375356
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed
To identify regions involved in tissue specific regulation of transcription of the alpha1(VI) collagen chain, transgenic mice were generated carrying various portions of the gene's 5'-flanking sequence fused to the E. coli beta-galactosidase gene. Analysis of the transgene expression pattern by X-gal staining of embryos revealed that: (a) The proximal 0.6 kb of promoter sequence activated transcription in mesenchymal cells at sites of insertion of superficial muscular aponeurosis into the skin; tendons were also faintly positive. (b) The region between -4.0 and -5.4 kb from the transcription start site was required for activation of the transgene in nerves. It also drove expression in joints, in intervertebral disks, and in subepidermal and vibrissae mesenchyme. (c) The fragment comprised within -6.2 and -7.5 kb was necessary for high level transcription in skeletal muscle and meninges. Positive cells in muscle were mostly mononuclear and probably included connective tissue elements, although staining of myoblasts was not ruled out. This fragment also activated expression in joints, in intervertebral disks, and in subepidermal and vibrissae mesenchyme. (d) beta-Galactosidase staining in vibrissae induced by the sequences -4.0 to -5.4 and -6.2 to -7.5 was not coincident: with the latter sequence labeled nuclei were found mainly in the ventral and posterior quadrant, and, histologically, in the outer layers of mesenchyme surrounding and between the follicles, whereas with the former the remaining quadrants were positive and expressing cells were mostly in the inner layers of the dermal sheath. (e) Other tissues, notably lung, adrenal gland, digestive tract, which produce high amounts of collagen type VI, did not stain for beta-galactosidase. (f) Central nervous system and retina, in which the endogenous gene is inactive, expressed the lacZ transgene in most lines. The data suggest that transcription of alpha1(VI) in different tissues is regulated by distinct sequence elements in a modular arrangement, a mechanism which confers high flexibility in the temporal and spatial pattern of expression during development.
Record Date Created: 19970109
Record Date Completed: 19970109

5/7/2
DIALOG(R)File 155:MEDLINE(R)
(c) format only 2003 The Dialog Corp. All rts. reserv.
10731638 97081112 PMID: 8922394
Distinct regions control transcriptional activation of the alpha1(VI) collagen promoter in different tissues of transgenic mice.
Braghetta P; Fabbro C; Piccolo S; Marvulli D; Bonaldo P; Volpin D; Bressan G M
Institute of Histology and Embryology, University of Padova, Italy.
Journal of cell biology (UNITED STATES) Nov 1996, 135 (4) p1163-77, ISSN 0021-9525 Journal Code: 0375356
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed
To identify regions involved in tissue specific regulation of transcription of the alpha1(VI) collagen chain, transgenic mice were generated carrying various portions of the gene's 5'-flanking sequence fused to the E. coli beta-galactosidase gene. Analysis of the transgene

expression pattern by X-gal staining of embryos revealed that: (a) The proximal 0.6 kb of promoter sequence activated transcription in mesenchymal cells at sites of insertion of superficial muscular aponeurosis into the skin; tendons were also faintly positive. (b) The region between -4.0 and -5.4 kb from the transcription start site was required for activation of the transgene in nerves. It also drove expression in joints, in intervertebral disks, and in subepidermal and vibrissae mesenchyme. (c) The fragment comprised within -6.2 and -7.5 kb was necessary for high level transcription in skeletal muscle and meninges. Positive cells in muscle were mostly mononuclear and probably included connective tissue elements, although staining of myoblasts was not ruled out. This fragment also activated expression in joints, in intervertebral disks, and in subepidermal and vibrissae mesenchyme. (d) beta-Galactosidase staining in vibrissae induced by the sequences -4.0 to -5.4 and -6.2 to -7.5 was not coincident: with the latter sequence labeled nuclei were found mainly in the ventral and posterior quadrant, and, histologically, in the outer layers of mesenchyme surrounding and between the follicles, whereas with the former the remaining quadrants were positive and expressing cells were mostly in the inner layers of the dermal sheath. (e) Other tissues, notably lung, adrenal gland, digestive tract, which produce high amounts of collagen type VI, did not stain for beta-galactosidase. (f) Central nervous system and retina, in which the endogenous gene is inactive, expressed the lacZ transgene in most lines. The data suggest that transcription of alpha1(VI) in different tissues is regulated by distinct sequence elements in a modular arrangement, a mechanism which confers high flexibility in the temporal and spatial pattern of expression during development.

Record Date Created: 19970109

Record Date Completed: 19970109

5/7/3

DIALOG(R)File 155:MEDLINE(R)

07900129 93360953 PMID: 8355676

Transgenic expression of COL1A1-chloramphenicol acetyltransferase fusion genes in bone: differential utilization of promoter elements in vivo and in cultured cells.

Krebsbach P H; Harrison J R; Lichtler A C; Woody C O; Rowe D W; Kream B E

Department of Periodontology, University of Connecticut Health Center, Farmington 06030.

Molecular and cellular biology (UNITED STATES) Sep 1993, 13 (9) p5168-74, ISSN 0270-7306 Journal Code: 8109087

Contract/Grant No.: AR29850; AR; NIAMS; AR29983; AR; NIAMS; AR38933; AR; NIAMS; +

Document type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: Completed

To directly compare the patterns of collagen promoter expression in cells and tissues, the activity of COL1A1 fusion genes in calvariae of neonatal transgenic mice and in primary bone cell cultures derived by sequential digestion of transgenic calvariae was measured. ColCAT3.6 contains 3.6 kb (positions -3521 to +115) of the rat COL1A1 gene ligated to the chloramphenicol acetyltransferase (CAT) reporter gene. ColCAT2.3 and ColCAT1.7 are 5' deletion mutants which contain 2,296 and 1,672 bp, respectively, of COL1A1 DNA upstream from the transcription start site. ColCAT3.6 activity was 4- to 6-fold lower in primary bone cell cultures than in intact calvariae, while ColCAT2.3 activity was at least 100-fold lower in primary bone cells than in calvariae. These changes were accompanied by a threefold decrease in collagen synthesis and COL1A1 mRNA levels in primary bone cells compared with collagen synthesis and COL1A1 mRNA levels in freshly isolated calvariae. ColCAT3.6 and ColCAT2.3 activity was maintained in calvariae cultured in the presence or absence of serum for 4 to 7 days. Thus, when bone cells are removed from their normal microenvironment, there is parallel downregulation of collagen synthesis, collagen mRNA levels, and ColCAT3.6 activity, with a much greater decrease in ColCAT2.3. These data suggest that a 624-bp region of the COL1A1 promoter between positions -2296 and -1672 is active in intact and cultured bone but inactive in cultured cells derived from the bone. We suggest that the downregulation of COL1A1 activity in primary bone cells may be due to the loss of cell shape or to alterations in cell-cell and/or cell-matrix interactions that normally occur in intact bone.

Record Date Created: 19930923

Record Date Completed: 19930923

? t s8/7/3 11 12

8/7/3

DIALOG(R)File 155:MEDLINE(R)

10721526 97070940 PMID: 8913866

Cell-specific expression of the alpha 1 (I) collagen promoter-CAT transgene in skin and lung: a response to TGF-beta subcutaneous injection and bleomycin endotracheal instillation.

Agarwal A R; Goldstein R H; Lucey E; Ngo H Q; Smith B D

Department of Biochemistry, Boston University Medical Center, MA 02118, USA.

Journal of cellular biochemistry (UNITED STATES) Nov 1 1996, 63 (2) p135-48, ISSN 0730-2312 Journal Code: 8205768

Document type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: Completed

Transgenic mice containing a rat collagen alpha 1 (I) promoter (3.6 kilobases) fused to the reporter gene chloramphenicol acetyl transferase (CAT) express the reporter gene parallel to endogenous gene in most connective tissues other than vascular tissue [Pavlin et al. (1992): J Cell

Biol 116:227-236; Bedalov et al. (1994): J Biol Chem 269:4903-4909]. We have challenged transgenic mice with subcutaneous injections of transforming growth factor-beta (TGF-beta) or intratracheal instillation of bleomycin. In situ hybridization studies of skin revealed increased CAT expression in the papillary dermis of TGF-beta treated animals. In contrast, alpha 1 (I) collagen mRNA was expressed throughout the dermis including granulation tissue and reticular dermis. Therefore, the transgenic promoter responds to TGF-beta in a subset of dermal fibroblasts. Endotracheal instillation of bleomycin induces lung fibrosis which is thought to be mediated in part by TGF-beta. CAT gene expression in lungs was increased 6-8-fold at 2 weeks post bleomycin treatment. In situ hybridization studies revealed focal areas of cells expressing both CAT and collagen genes in the interstitium. However, most regions, especially around airways, contained a subset of cells expressing the endogenous gene with little or no CAT expression as judged by in situ hybridization. These cells could be myofibroblasts that require additional cis-acting elements to activate alpha 1 (I) collagen gene expression similar to smooth muscle cells.

Record Date Created: 19970303
Record Date Completed: 19970303

8/7/11
DIALOG(R)File 155:MEDLINE(R)

06350292 89366639 PMID: 2771638
Analysis of the collagen alpha 1(I) promoter.
Brenner D A; Rippe R A; Veloz L
Center for Molecular Genetics, University of California, San Diego 92093.
Nucleic acids research (ENGLAND) Aug 11 1989, 17 (15) p6055-64, ISSN 0305-1048 Journal Code: 0411011
Contract/Grant No.: DK07202; DK; NIDDK
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed

The collagen alpha 1(I) gene is regulated at a developmental and tissue specific level. We have previously demonstrated that only 220bp of the promoter region of the collagen alpha 1(I) gene are required for efficient expression in NIH 3T3 cells. DNAse I protection assays demonstrated 4 footprinted segments in the promoter region. Deletional analysis revealed that the 3 most proximal footprints were required for maximal expression. The most proximal footprint contains a CCAAT sequence and a 12bp segment that forms a direct repeat with the preceding footprint. Ligation of the proximal footprint sequence to a heterologous promoter enhanced transcription of the reporter gene. These studies, therefore, identify and characterize elements in the promoter region of the collagen alpha 1(I) gene that interact with DNA binding proteins and are required for efficient expression.

Record Date Created: 19890929
Record Date Completed: 19890929

8/7/12
DIALOG(R)File 155:MEDLINE(R)

05426957 87105547 PMID: 3026807
Enhancer-mediated activation of a growth-regulated promoter.
Moore G; Yaniv M
European journal of biochemistry / FEBS (GERMANY, WEST) Jan 15 1987, 162 (2) p333-8, ISSN 0014-2956 Journal Code: 0107600
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed

We have demonstrated that the collagen alpha 2 type 1 promoter inserted in an expression vector, behaves as a growth-regulated promoter, which is consistent with previous observations that collagen synthesis is growth-regulated in vivo. In contrast, the activity of the H2-K or the simian virus 40 early promoters does not seem to be affected by the rate of cell proliferation. The insertion of a polyoma enhancer 5' or 3' to the collagen transcription unit activates the collagen alpha 2 type 1 promoter, by a threefold greater factor in slowly growing cells compared to cells growing exponentially. These results show that enhancers can also function in slowly proliferating cells and activate the normally low activity of a promoter in these cells.

Record Date Created: 19870316
Record Date Completed: 19870316
? t s10/7/37 47
10/7/37
DIALOG(R)File 155:MEDLINE(R)

07780543 93236040 PMID: 8476045
Type I collagen gene regulation and the molecular pathogenesis of cirrhosis.
Brenner D A; Westwick J; Breindl M
Department of Medicine, University of California, La Jolla.
American journal of physiology (UNITED STATES) Apr 1993, 264 (4 Pt 1) pG589-95, ISSN 0002-9513 Journal Code: 0370511
Contract/Grant No.: R01-GM-41804; GM; NIGMS; R29-DK-3996; DK; NIDDK
Document type: Journal Article; Review; Review, Academic
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed

Cirrhosis is characterized by an increased deposition of extracellular matrix proteins, including type I collagen. Type I collagen is a product of

two genes, alpha 1(I) and alpha 2(I), which are generally coordinately regulated. Since expression of type I collagen genes is increased during cirrhosis, understanding the structure and function of the regulatory components of the type I collagen genes should provide insight into the molecular pathogenesis of cirrhosis. This review will analyze the collagen alpha 1(I) gene with respect to chromatin structure, DNA methylation, regulation by agonists, and DNA-protein interactions. (68 Refs.)
Record Date Created: 19930517
Record Date Completed: 19930517

10/7/47
DIALOG(R)File 155:MEDLINE(R)
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06297618 89313771 PMID: 2747648
Regulatory elements in the 5'-flanking region and the first intron contribute to transcriptional control of the mouse alpha 1 type I collagen gene.
Rippe R A; Lorenzen S I; Brenner D A; Breindl M
Department of Medicine, Veterans Administration Medical Center, San Diego, California 92161.
Molecular and cellular biology (UNITED STATES) May 1989, 9 (5) p2224-7, ISSN 0270-7306 Journal Code: 8109087
Contract/Grant No.: DK 07202; DK; NIDDK; DK 39996; DK; NIDDK
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed
We have identified two blocks of regulatory sequences located in the 5'-flanking region and the first intron of the mouse alpha 1 type I collagen (COL1A1) gene. Both blocks were found to contain positive as well as negative regulatory elements. Sequences located within 222 base pairs upstream of the transcription start site showed a strong stimulatory effect on the COL1A1 promoter and were sufficient for tissue-specific regulation of the COL1A1 gene. The combined upstream and intron regulatory sequences showed a marked inhibition of COL1A1 promoter activity in fibroblasts. This finding suggests that additional, more remote regulatory sequences may be required for establishing the high level of activity of the endogenous COL1A1 gene in fibroblastoid cells.
Record Date Created: 19890818
Record Date Completed: 19890818
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$11.80 Estimated total session cost 2.132 DialUnits
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